

FIG.1

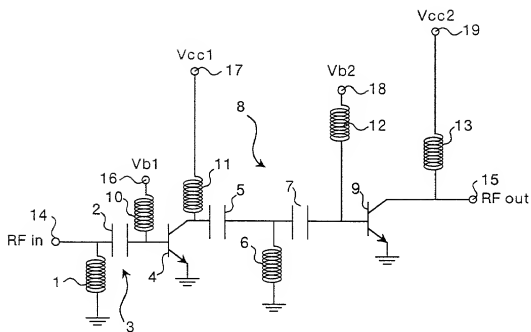


FIG.2

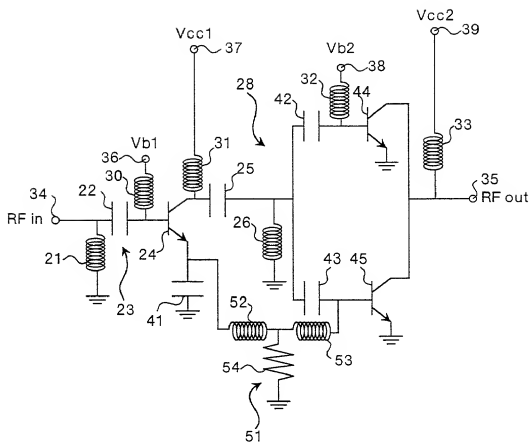


FIG.3

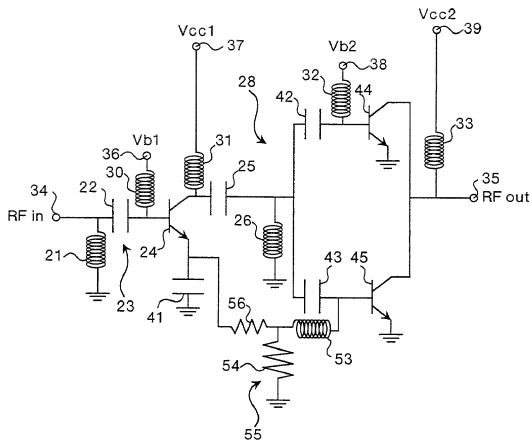


FIG.4

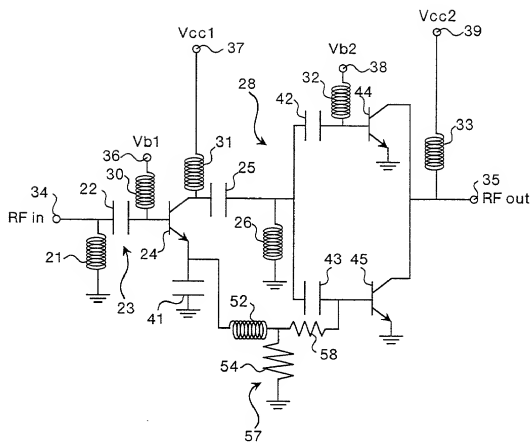


FIG.5

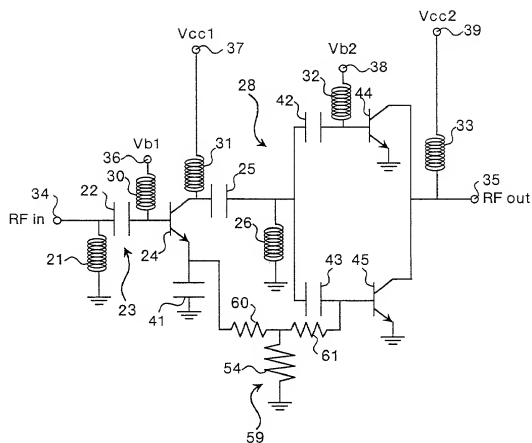


FIG.6

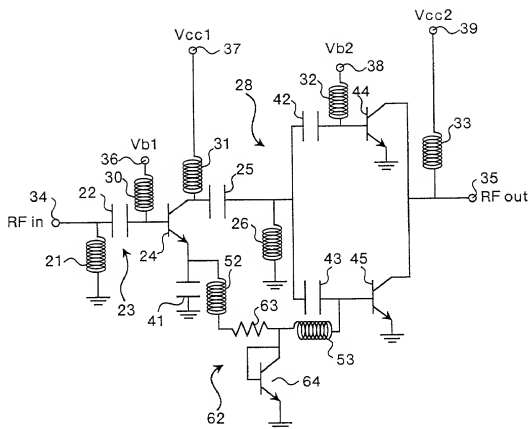


FIG. 7

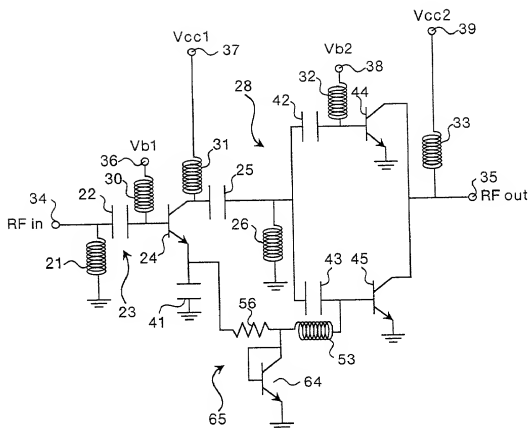


FIG.8

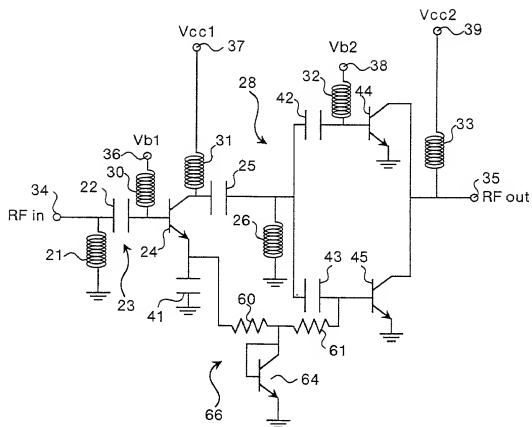




FIG.9

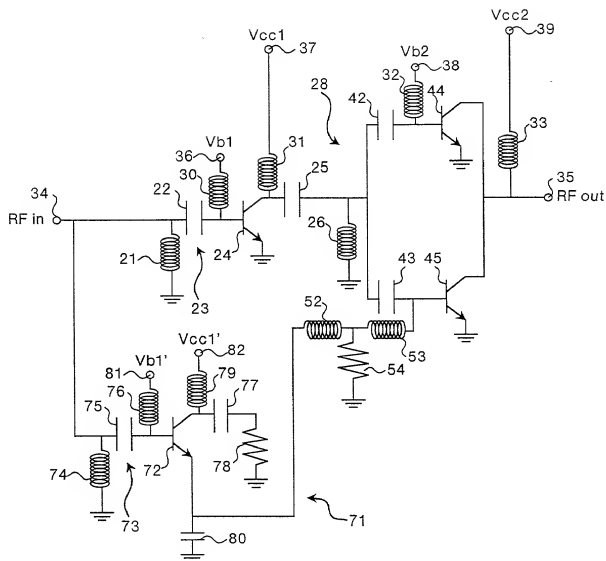


FIG.10

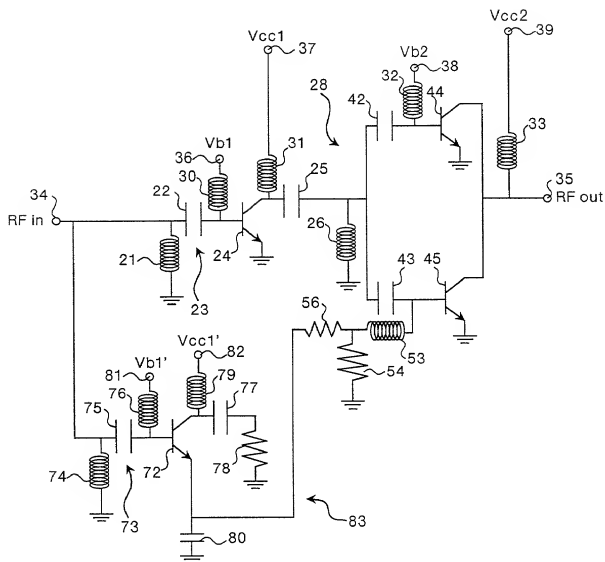


FIG.11

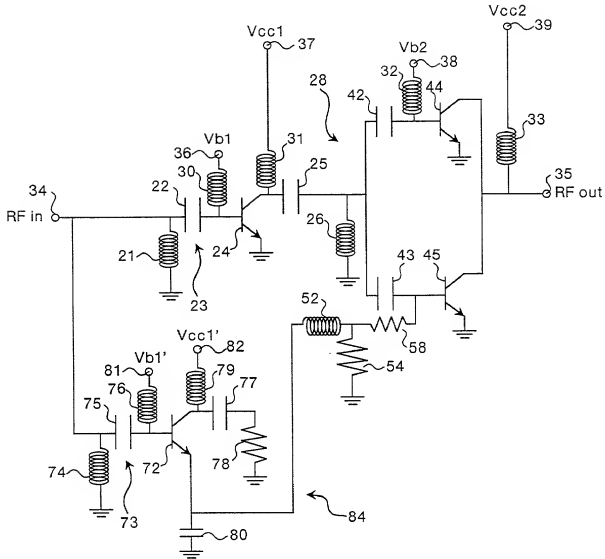




FIG.13

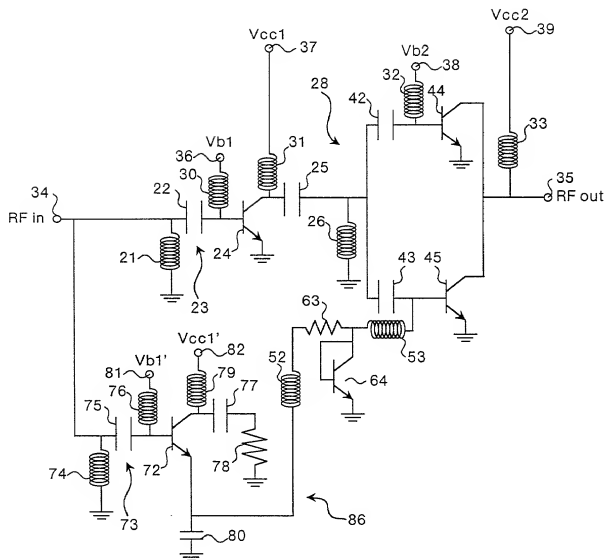
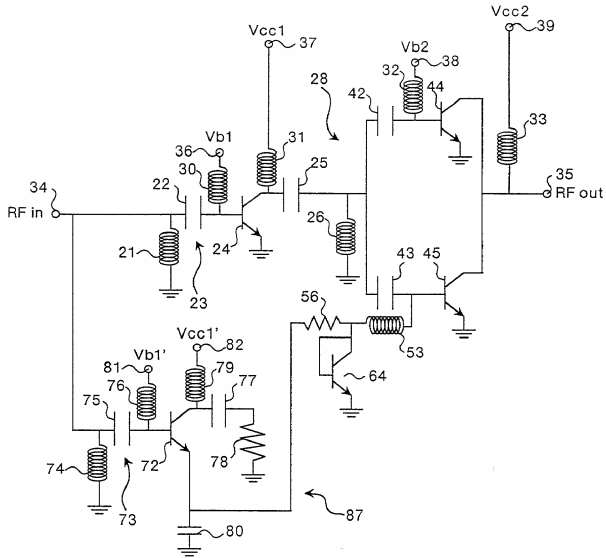


FIG.14



The circuit diagram illustrates a variable gain amplifier (28) and a feedback control circuit (88). The amplifier (28) consists of a first transistor (21) with its base connected to an RF input (34) through a matching network (20) and a series inductor (22). The base of transistor 21 is also connected to ground through a parallel combination of a capacitor (23) and an inductor (24). The emitter of transistor 21 is connected to ground through a series combination of an inductor (30) and a capacitor (36). The collector of transistor 21 is connected to a Vcc1 supply (37) through a series combination of a capacitor (31) and an inductor (33). The output of the amplifier is taken from the collector of transistor 21 through a series combination of a capacitor (32) and an inductor (38), connected to a Vb2 supply (39). The feedback control circuit (88) includes a second transistor (75) with its base connected to the RF input (34) through a matching network (74) and a series inductor (76). The base of transistor 75 is also connected to ground through a parallel combination of a capacitor (73) and an inductor (72). The emitter of transistor 75 is connected to ground through a series combination of an inductor (79) and a capacitor (82). The collector of transistor 75 is connected to a Vcc1' supply (80) through a series combination of a capacitor (77) and an inductor (81). The output of the feedback control circuit is taken from the collector of transistor 75 through a series combination of a capacitor (78) and an inductor (83), connected to a Vb1' supply (84). The feedback signal is fed back to the base of the first transistor (21) through a series combination of a capacitor (35) and an inductor (34).